



03-2806

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Calhoun, et al.

Serial No.: 10/692,699

Filed: 6/30/2003

Title: Discovery of Rogue Access Point  
Location in Wireless Network  
Environments

Group Art Unit: 2684

Examiner:

Attorney Docket No.: 6561/53780

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with a:  
☐ Statement under 37 CFR 1.97(e), and  
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).  
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)
- ☐ Statement under 37 CFR 1.97(e): Applicant states That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information

disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.

X Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

The relevance of the attached references is that this is the closest art of which Applicant is aware. Applicant submits that the above references taken alone or in combination neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to this application is respectfully requested.


Applicant does not admit that the references, included in this Information Disclosure Statement, constitute prior art under the relevant statutes.

It is requested that the information disclosed herein be made of record in this application.

Respectfully submitted,

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Certification Under 37 CFR §1.10 (if applicable)  
Express Mail Label No. EO918956476US

I hereby certify that this Transmittal, enclosed Information Disclosure Statement, and any other documents referred to as enclosed herein, being deposited in an envelope with the United States Postal Service "Express Mail" service under 37 CFR §1.10 on the date above and addressed to the Commissioner for Patents, Alexandria, Virginia 22313-1450.


  
Jonathan P. Kudla  
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Reg. No. 47,124

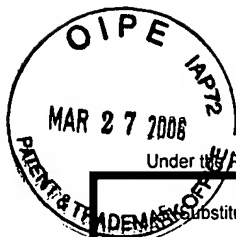
Date of Deposit: March 27, 2006

Date: March 27, 2006

Typed Name: Anne M. O'Shea

Telephone No.: 415-826-7966

Signature: 



PTO/SB/08a (07-05)

Approved for use through 07/31/2006. OMB 0651-0031  
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/692,699
				Filing Date	10/24/2003
				First Named Inventor	Calhoun
				Art Unit	2684
				Examiner Name	
Sheet	1	of	3	Attorney Docket Number	6561/53780

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		US-2003/0117985 A1	06-26-2003	Fujii, et al.	
		US-2003/0135762 A1	07-17-2003	Macaulay	
		US-2002/0174335 A1	11-21-2002	Zhang, et al.	
		US-6,456,892 B1	09-24-2002	Dara-Abrams, et al.	
		US-5,564,079	10-08-1996	Olsson	
		US-6,134,448	10-17-2000	Shoji, et al.	
		US-6,112,095	08-29-2000	Wax, et al.	
		US-6,115,605	09-05-2000	Siccardo, et al.	
		US-6,140,964	10-31-2000	Sugiura, et al.	
		US-6,198,935 B1	03-06-2001	Saha, et al.	
		US-6,212,391 B1	04-03-2001	Saleh, et al.	
		US-6,259,406 B1	07-10-2001	Sugiura, et al.	
		US-6,269,246 B1	07-31-2001	Rao, et al.	
		US-6,275,190 B1	08-14-2001	Sugiura, et al.	
		US-6,282,427 B1	08-28-2001	Larsson, et al.	
		US-6,304,218 B1	10-16-2001	Sugiura, et al.	
		US-6,415,155 B1	07-02-2002	Koshima, et al.	
		US-6,249,252 B1	06-19-2001	Dupray	
		US-6,414,634 B1	07-02-2002	Tekinay	
		US-6,441,777 B1	08-27-2002	McDonald	
		US-6,526,283 B1	02-25-2003	Jang	
		US-6,556,942 B1	04-29-2003	Smith	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		EP 0 930 514 A2	07-21-1999			
		EP 0 967 816 A1	12-29-1999			
		EP 1 018 457 A1	07-12-2000			
		EP 1 296 531 A1	03-26-2003			
		EP 1 301 055 A1	04-09-2003			
		JP 02044929	02-14-1990			
		WO 02/054813 A1	07-11-2002			
		WO 03/023443 A2	03-20-2003			
		WO 97/33386	10-17-2000			
		WO 98/41048	12-29-1999			
		WO 99/08909	07-12-2000			
		WO 02/43425 A1	05-30-2002			

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Substitute for form 1449B/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<i>Application Number</i>	10/692,699
		<i>Filing Date</i>	10/24/2003
		<i>First Named Inventor</i>	Calhoun
		<i>Art Unit</i>	2684
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(Use as many sheets as necessary)		<i>Attorney Docket Number</i>	6561/53780
Sheet	2	of	3

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Chirumamilla, Mohan K. and Ramamurthy, Byrav. "Agent Based Intrusion Detection and Response System for Wireless LANs." IEEE Int'l Conference on Communications, 2003, Vol. 1, pp. 492-496.	
		"IBM Research Demonstrates Industry's First Auditing Tool for Wireless Network Security." July 12, 2001, Hawthorne, N.Y. IBM RESEARCH NEWS, "Online. URL: <a href="http://domino.research.ibm.com/comm/pr.nsf/pages/news.20010712_wireless.html">http://domino.research.ibm.com/comm/pr.nsf/pages/news.20010712_wireless.html</a>	
		"IBM Researchers Demonstrate Industry's First Self-Diagnostic Wireless Security Monitoring Tool." June 21, 2002, Hawthorne, N.Y. IBM NIEUWS, "Online! URL: <a href="http://domino.research.ibm.com/comm/pr.nsf/pages/news.20020617_dwsa.html">http://domino.research.ibm.com/comm/pr.nsf/pages/news.20020617_dwsa.html</a>	
		"Ekahau Logical Areas-location enabling the Wi-Fi network." April 4, 2003. Ekahau, Inc., Saratoga, CA. Company's URL: <a href="http://www.ekahau.com">www.ekahau.com</a>	
		"Ekahau Positioning Engine 2.0: Product Overview." April 4, 2003. Ekahau, Inc., Saratoga, CA. URL: <a href="http://www.ekahau.com/products/positioningengine/">http://www.ekahau.com/products/positioningengine/</a>	
		"Ekahau Positioning Engine 2.0: Data Sheet." April 04, 2003. Ekahau, Inc., Saratoga, CA. URL: <a href="http://www.ekahau.com/pdf/EPE_2.0_datasheet.PDF">http://www.ekahau.com/pdf/EPE_2.0_datasheet.PDF</a>	
		"Indoor Positioning in 802.11b Networks." April 04, 2003. Ekahau, Inc., Saratoga, CA. URL: <a href="http://www.ekahau.com/products/positioningengine/features.html">http://www.ekahau.com/products/positioningengine/features.html</a>	
		"InFielder." April 22, 2003. Wireless Valley, Austin, TX. URL: <a href="http://www.wirelessvalley.com/Products/InFielder/InFielder.asp">http://www.wirelessvalley.com/Products/InFielder/InFielder.asp</a>	
		"LANFielder." April 22, 2003. Wireless Valley, Austin, TX. URL: <a href="http://www.wirelessvalley.com/Products/LANFielder/LANFielder.asp">http://www.wirelessvalley.com/Products/LANFielder/LANFielder.asp</a>	
		"Optimatic." April 22, 2003. Wireless Valley, Austin, TX. URL: <a href="http://www.wirelessvalley.com/Products/Optimatic/Optimatic.asp">http://www.wirelessvalley.com/Products/Optimatic/Optimatic.asp</a>	
		"Predictor." April 22, 2003. Wireless Valley, Austin, TX. URL: <a href="http://www.wirelessvalley.com/Products/Predictor/Predictor.asp">http://www.wirelessvalley.com/Products/Predictor/Predictor.asp</a>	
		"LANFielder Product Literature." February 10, 2004. Wireless Valley, Austin, TX. URL: <a href="http://www.wirelessvalley.com/Assets/brochures/LanFielder.pdf">http://www.wirelessvalley.com/Assets/brochures/LanFielder.pdf</a>	
		Conley, C.. "Securing WLANS with Location-Enabled Networks." Wireless Security Perspectives, Vol.5, No.3, March, 2003. Organization's URL: <a href="http://www.cnp-wireless.com/wsp.html">www.cnp-wireless.com/wsp.html</a>	

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Sheet	3	of	3	Examiner Name	
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NON PATENT LITERATURE DOCUMENTS			
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		"Company Information." April 6, 2004. Corsair Communications: A LightBridge Company, Burlington, MA. Company's URL: <a href="http://www.lightbridge.com">www.lightbridge.com</a>	
		"Corporate Fact Sheet." Aruba Wireless Networks, San Jose, CA. February 10, 2004. URL: <a href="http://www.arubanetworks.com/pdf/corporate_fact_sheet.pdf">http://www.arubanetworks.com/pdf/corporate_fact_sheet.pdf</a>	
		"Airwave Rogue Access Point Detection." 2002. Airwave Wireless, Inc. San Mateo, CA. URL: <a href="http://airwave.com/features.html">http://airwave.com/features.html</a>	
		Geier, J. "Identifying Rogue Access Points." January 6, 2003. Wi-Fi Planet Tutorials. URL: <a href="http://www.wi-fiplanet.com/tutorials/article.php/1564431">http://www.wi-fiplanet.com/tutorials/article.php/1564431</a>	
		Brewin, B. "IBM Develops Tool to Detect Rogue Wireless LAN Access Points." June 17, 2002. Computerworld, Framingham, MA. URL: <a href="http://www.computerworld.com/mobiletopics/mobile/story/0,10801,72065,00.html">http://www.computerworld.com/mobiletopics/mobile/story/0,10801,72065,00.html</a>	
		Bulusu, N., Heidemann, J., Estrin, D. "GPS-less Low Cost Outdoor Localization for Very Small Devices." <i>IEEE Personal Communications</i> , October 2000. URL: <a href="http://lecs.cs.ucla.edu/~bulusu/papers/Bulusu00a.pdf">http://lecs.cs.ucla.edu/~bulusu/papers/Bulusu00a.pdf</a>	
		"Assessing Wireless Security with AiroPeek and AiroPeek NX." A WildPackets Academy Tutorial from <a href="http://www.wildpackets.com">www.wildpackets.com</a> , WildPackets Inc., Walnut Creek, CA. January 16, 2003. URL: <a href="http://www.wildpackets.com/elements/whitepapers/AiroPeek_Security.pdf">http://www.wildpackets.com/elements/whitepapers/AiroPeek_Security.pdf</a>	
		"AiroPeek and Wireless Security: Identifying and Locating Rogue Access Points." A WildPackets Academy Tutorial from <a href="http://www.wildpackets.com">www.wildpackets.com</a> , WildPackets Inc., Walnut Creek, CA. January 16, 2003. URL: <a href="http://www.wildpackets.com/elements/whitepapers/RogueAccessPoints.pdf">http://www.wildpackets.com/elements/whitepapers/RogueAccessPoints.pdf</a>	
		Craiger, J. P. "802.11, 802.1x, and Wireless Security." June 23, 2002. From the SANS' Information Security Reading Room on <a href="http://www.sans.org">www.sans.org</a> , The SANS Institute, Bethesda, MD. URL: <a href="http://www.sans.org/rr/papers/68/171.pdf">http://www.sans.org/rr/papers/68/171.pdf</a>	
		Baily, S. "Is IEEE 802.1X Ready for General Deployment?" April 7, 2002. From the SANS' Information Security Reading Room on <a href="http://www.sans.org">www.sans.org</a> , The SANS Institute, Bethesda, MD. URL: <a href="http://www.sans.org/rr/papers/9/709.pdf">http://www.sans.org/rr/papers/9/709.pdf</a>	

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